

REMARKS

Claims 1 through 26 remain in the application, with claim 1 in independent form. Claim 1 has been amended and claims 2 through 26 are unchanged by the instant Amendment.

Claim Amendment and Comments

Claim 1 has been amended to claim a surface active agent content of greater than 0 but not more than 0.3 wt% to make clear that the surface active agent content of component (E) is *not* an optional component of the present invention. Support for this amendment can be found in paragraphs [0015] and [0027] of the instant specification. Accordingly, no new matter has been introduced.

Further, the Applicants direct the Examiner to page four of the instant Office Action, where the Examiner asserts that U.S. Patent No. 5,082,596 to Fukuda et al. (Fukuda) is “construed to read on” component (E) of the present invention, as claimed. Here, the Examiner apparently relies on Fukuda to establish a disclosure or teaching of component (E). *However*, in view of the instant Amendment, the Applicants respectfully traverse this issue with regard to the surface active agent content of component (E). More importantly, to support this traversal, the Applicants direct the examiner to the Declaration Under 37 CFR § 1.132, which is filed herewith.

Claim Rejections - 35 USC §103

Claims 1 through 26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Fukuda in view of U.S. Publication No. 2002/0049274 to Azechi et al. (Azechi). As described above, the Applicants respectfully traverse these rejections. Further, to support this traversal,

the Applicants refer to the Declaration Under 37 CFR § 1.132, filed herewith. The Declaration has been executed by the second inventor, Kazumi Nakayoshi, who is one highly skilled in the art of silicones including silicone rubber compositions and methods for producing such silicone rubber compositions including, in particular, electrically conductive silicone rubber compositions. Considering the clarifying impact of the Declaration, it is clear that the disclosure and teaching of Fukuda does not necessarily teach the electrically conductive silicone rubber composition of the present invention as claimed. The same is true for Azechi. Specifically, the Applicants assert that *even if* the Examiner has established a *prima facie* case of obviousness with regard to the present invention in light of the prior art, the *prima facie* case is rebutted by evidence (e.g. Examples in the original application and the Declaration) showing that the prior art products, e.g. Fukuda's electroconductive silicone rubber composition, do not necessarily possess the characteristics of the present invention, as claimed. See MPEP §2112.01 and *In re Best*, 562 F.2d at 1255, 195 USPQ at 433 (C.C.P.A. 1977).

To summarize, claim 1 (as amended) encompasses an electrically conductive silicone rubber composition. The electrically conductive silicone rubber composition comprises (A) 100 parts by weight of an organopolysiloxane having at least two alkenyl groups per molecule, (B) an amount sufficient to cure composition, of an organopolysiloxane having at least two silicon-bonded hydrogen atoms per molecule, (C) an amount sufficient to promote cure of the composition, of a platinum based catalyst, (D) 300 to 5,000 parts by weight of a metal based electrically conductive filler, and (E) 5 to 500 parts by weight of spherical silicone rubber

particles with a surface active agent content of greater than 0 but not more than 0.3 wt% (emphasis added).

The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1395-97 (2007) identified a number of rationales to support a conclusion of obviousness which are consistent with the proper “functional approach” to the determination of obviousness as laid down in *Graham*. See MPEP §2143. Existing precedent provides guidance for establishing a motivation to modify a reference or references. In particular, “[t]he motivation to modify the prior art must flow from some teaching in the art that suggests the desirability or incentive to make the modification needed to arrive at the claimed invention.” See *Alza Corp. v. Mylan Laboratories Inc.*, 391 F.3d 1365 (Fed. Cir. 2004). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. See *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). In addition, “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” See MPEP §2143.03 citing *In re Wilson*, 424 F.2d 1382, 1385 (C.C.P.A. 1970).

As introduced above, in the instant Office Action, the Examiner suggests that the disclosure of Fukuda is “construed to read on the claimed spherical silicone rubber particles with a surface active agent content of not more than 0.3 wt%”. The Applicant’s respectfully assert that the Examiner’s construction of the actual disclosure and teaching of Fukuda is improper. As alluded to above, and with reference to paragraphs 5 and 8 through 11 of the Declaration, the invention as claimed in the present application is unique and distinguishable

from Fukuda and Azechi. Specifically, the disclosure and teachings of Fukuda (or Azechi) do not necessarily teach the electrically conductive silicone rubber composition of the invention as claimed and taught in the present application (see MPEP §2112.01 citing *In re Best* 562 F.2d at 1255, 195 USPQ at 433). *Instead*, quite broadly, Fukuda and Azechi merely teach an electrically conductive silicone rubber composition. Further, if the Examiner is going to rely on Fukuda in this manner, it is important to appreciate that the electrically conductive silicone rubber composition taught by Fukuda has a higher surface active agent content than the surface active agent content as claimed in the present application as evidenced in the Declaration.

With reference to paragraph 11 of the Declaration, individually, or even if Fukuda and Azechi were to be combined, Fukuda and Azechi do not teach (or even suggest) an electrically conductive silicone rubber composition including spherical silicone rubber particles with a surface active agent content of greater than 0 but not more than 0.3 wt%, as claimed in the present application. In addition, Fukuda and Azechi merely teach using surface active agents for formation of rubber particles, which was already well known in the art. Specifically, the Applicants assert that one skilled in the art as established in the Declaration, at the time of filing the present application, would not have linked specific surface active agent contents with drastic changes in viscosity, as in the present invention and as further described below, since the methods taught by Fukuda and Azechi only minimally describe any use of surface active agents.

As described in paragraph 8 of the Declaration, the Applicants can find nothing in Fukuda that teaches spherical silicone rubber particles having any particular surface active agent content, *especially* spherical silicone rubber particles having a surface active agent content of

greater than 0 but not more than 0.3 wt%, as claimed for the present invention. The Applicants recognize that Fukuda describes various methods of making a silicone rubber, including a method of using surface active agents in aqueous solutions to make emulsions. *However*, Fukuda does not teach (or even suggest) a surface active agent content of the silicone rubber made by such methods. In fact, the method described in Fukuda is silent with regard to an amount of a surface active agent employed to make their emulsions and therefore their silicone rubber (see column 3, lines 48-58), and notably does not even mention the use of a surface active agent in its examples (see generally columns 6 and 7).

As described in paragraph 9 of the Declaration, upon further investigation of Japanese Patent Kokai 62-257939 (the '939 patent), which is cited in Fukuda (see column 3, line 46), again, there is no teaching or suggestion of a surface active agent content in an emulsion taught by the '939 patent. Further, in an example of the '939 patent, 3 parts by weight of a surface active agent is used per 110 parts by weight of a curable organopolysiloxane composition. Since this example of the '939 patent was carried out in the same way as Reference Example 1 of the present application, the content of the surface active agent will be approximately 0.5 wt%. In other words, the only teaching of the '939 patent is above 0.3 wt% surface active agent content, and is in fact congruent with Reference Example 1 of the present application.

As described in paragraph 10 of the Declaration, the Applicants assert that Reference Example 1 (i.e., a Comparative Example) of the present application falls within the exact steps of the methods taught by Fukuda. In addition, it can be concluded that greater than 0.3 wt% of surface active agent content is present in the silicone rubber particles disclosed by Fukuda.

Accordingly, a teaching (or even a suggestion) of a surface active agent content of greater than 0 but not more than 0.3 wt% is not present in Fukuda.

To elaborate these differences, and as described in paragraph 10 of the Declaration, first, Fukuda does not teach or even suggest a specific amount of surface agent employed to form its silicone rubber, and *more importantly*, makes no mention whatsoever of an end surface active agent content in its silicone rubber. Second, various amounts of a surface active agent, which can eventually yield a surface active agent content greater than 0.3 wt%, can be used to make the silicone powder of Fukuda, such as described above with regard to the '939 patent. Third, there is no teaching or suggestion of any steps that would in fact reduce the surface active agent content of the silicone rubber, and *more importantly* there is no teaching or suggestion of desirability to reduce the content of the surface active agent in the silicone powder. *Rather*, Fukuda only teaches a step of spray-drying the emulsion to obtain the silicone rubber from the emulsion. *Conversely*, as described in the instant specification, the spherical rubber particles of the present invention are generally post-treated, such as by filtering and rinsing the spherical rubber particles with water, to obtain the desired surface active agent content of greater than 0 but not more than 0.3 wt% as claimed in the present application (see Reference Example 2 and paragraph [0016] in the instant specification).

Further, as described in the instant specification, component “(E) is *characterized* by containing not more than 0.3 weight% of surface active agent” (emphasis added, paragraph [0015]). Specifically, as described in paragraph 5 of the Declaration, the wt% content of the surface active agent affects viscosity of the electrically conductive silicone rubber

composition. Further, with reference to the examples of the present application, it is shown that having *higher* than 0.3 wt% of a surface active agent, e.g. 0.5 wt% (see Reference Example 1), leads to marked increases in viscosity, such that homogenous compositions could not be prepared. *However*, using 0.3 wt% or less of a surface active agent, e.g. 0.1 wt% (see Reference Example 2, i.e., an Inventive Example), leads to little to no increase in viscosity of the compositions prepared (see paragraphs [0030] and [0037]). As shown through the examples in the present application, conventional methods of preparing the electrically conductive silicone rubber composition using a surface active agent, such as those taught by Fukuda, results in surface active agent contents that are in excess of those as claimed in the present invention (see again Reference Example 1), and additional steps are required to lower the surface active agent content to those levels as claimed for the present invention (see again Reference Example 2).

In view of the foregoing, the Applicants respectfully submit that claim 1 is both novel and non-obvious, in view of the disclosure, teachings, and suggestions of the prior art such that claim 1, as well as the claims that depend therefrom, are in condition for allowance. If any additional fees are necessary to respond to the outstanding Office Action, you are hereby authorized to charge such fees to Deposit Account No. 08-2789 in the name of Howard & Howard.

Respectfully submitted,

HOWARD & HOWARD ATTORNEYS

March 10, 2008

Date

/David M. LaPrairie/

David M. LaPrairie, Registration No. 46,295

Howard and Howard Attorneys, P.C.

The Pinehurst Office Center, Suite 101

39400 Woodward Ave.

Bloomfield Hills, MI 48304-5151

(248) 723-0442